

§ 101.1

47 CFR Ch. I (10–1–00 Edition)

101.1333 Interference protection criteria.

AUTHORITY: 47 U.S.C. 154, 303.

SOURCE: 61 FR 26677, May 28, 1996, unless otherwise noted.

Subpart A—General

§ 101.1 Scope and authority.

(a) Part 1 of the Commission's rules contains the general rules of practice and procedure applicable to proceedings before the Commission and for the filing of applications for radio station licenses in the fixed microwave services.

(b) The purpose of the rules in this part is to prescribe the manner in which portions of the radio spectrum may be made available for private operational, common carrier, and Local Multipoint Distribution Service fixed, microwave operations that require transmitting facilities on land or in specified offshore coastal areas within the continental shelf.

(c) The rules in this part are issued pursuant to the authority contained in Titles I through III of the Communications Act of 1934, as amended, which vest authority in the Federal Communications Commission to regulate common carriers of interstate and foreign communications, to regulate radio transmissions and issue licenses for radio stations, and to regulate all interstate and foreign communications by wire and radio necessary to the accomplishment of the purposes of the Act.

[61 FR 26677, May 28, 1996, as amended at 62 FR 23163, Apr. 29, 1997; 63 FR 68981, Dec. 14, 1998]

§ 101.3 Definitions.

As used in this part:

Antenna power gain. The ratio of the maximum radiation intensity to that of an isotropic (omnidirectional) radiator in the far field of its main (forward direction) lobe.

Antenna power input. The radio frequency peak or RMS power, as the case may be, supplied to the antenna from the antenna transmission line and its associated impedance matching network.

Antenna structure. The antenna, its supporting structure and anything attached to it.

Assigned frequency. The center of the frequency band assigned to a station.

Assigned frequency bandwidth. The frequency band within which the emission of a station is authorized; the width of the band equals the necessary bandwidth plus twice the absolute value of the frequency tolerance.

Authorized bandwidth. The maximum bandwidth authorized to be used by a station as specified in the station license. (See § 2.202 of this chapter)

Authorized frequency. The frequency, or frequency range, assigned to a station by the Commission and specified in the instrument of authorization.

Authorized power. The maximum power a station is permitted to use. This power is specified by the Commission in the station's authorization.

Automatic Transmitter Power Control (ATPC). ATPC is a feature of a digital microwave radio system that adjusts the transmitter output power. ATPC allows the transmitter to operate at less than maximum power for most of the time. In a radio employing ATPC, the transmit power is reduced during normal operation conditions. When the receiver detects a reduction in signal level, a control signal is sent to the far end transmitter, instructing it to increase the power output to compensate for the signal reduction. The power output is limited to the licensed (maximum) transmit power. Guidelines for use of ATPC are set forth in the TIA Telecommunications Systems Bulletin TSB 10, "Interference Criteria for Microwave Systems (TSB 10)."

Bandwidth occupied by an emission. The band of frequencies comprising 99 percent of the total radiated power extended to include any discrete frequency on which the power is at least 0.25 percent of the total radiated power.

Bit rate. The rate of transmission of information in binary (two state) form in bits per unit time.

Carrier. In a frequency stabilized system, the sinusoidal component of a modulated wave whose frequency is independent of the modulating wave; or the output of a transmitter when the modulating wave is made zero; or a